

Parliamentary Budget Office

DATA AND MODEL STRATEGY 2023 – 2025

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Foreword



I am pleased to present the Parliamentary Budget Office (PBO) *Data and Model Strategy 2023 – 2025*.

Our vision is that the PBO enriches Australia's democracy through independent budget and fiscal analysis. Our analysis and the tools we provide to parliamentarians and other users draw on our own data, models, and experience. In order to ensure a high-level of consistency and transparency we also depend on the data and models we can obtain from Australian Government departments and agencies.

Trust in data and models is fundamental to what we do. Users need to have confidence that we are providing them with the best information we can, and that they can rely upon it. Departments and agencies need to have confidence that we will manage the information and models they provide us securely and with appropriate skill and sensitivity.

We have more models and datasets than we have people. Currently, our forty-four people manage over 70 different models drawn from across government or developed internally. Together they use a wide range of financial, economic, social and environment data to inform our analysis.

Our new data and model strategy is designed to enhance the way that the PBO collects, manages, and uses the valuable information we hold. It commits us to making use of this information to improve the quality and transparency associated with the budget and policy costings.

The PBO will continue to enhance our data and models including making information more accessible, such as through the <u>Build Your Own Budget</u> tool. This strategy will guide our actions and enable us to monitor our progress.

As the volume of information we rely upon continues to grow, implementation of the strategy will ensure that we continue to properly manage and invest our resources in this key area.

Stein Helgeby

Parliamentary Budget Officer 27 July 2023

Purpose

The Parliamentary Budget Office (PBO) provides independent and non-partisan analysis of the budget cycle, fiscal policy, and the financial implications of proposals. To deliver on these objectives, the PBO relies on staff expertise, data and models.

The *Data and Model Strategy 2023 – 2025* supports the management of the data and models held within the PBO, consistent with our legislative and data sharing agreement requirements. The strategy will support strong data management practices and innovation to improve PBO costings, publications, and operations.

This strategy is supported by an internal action plan which focusses on building capability and establishing a systematic approach to managing the increasing number of data and models held by the PBO to:

- publish budget data not easily accessible
- manage and use information to support PBO costings and publications
- future-proof modelling and data infrastructure
- support innovation and a strong analytics capability.

PURPOSE	VISION
Inform the Parliament by providing independent and non-partisan analysis of the budget cycle, fiscal policy, and the financial implications of proposals.	Enriching Australia's democracy through independent budget and fiscal analysis.

Principles

Recognising the PBO is a small, agile agency that undertakes a broad scope of work, our principles for data and modelling are:

- Accessible, discoverable, and easily interpreted. Simplicity is preferred.
- **Consistent and coherent**, utilising information requests from agencies, backed by empirical evidence and informed by expert advice.
- Fit for purpose, supporting high quality and robust costings and analysis in a timely way.
- Safe, with strong privacy, security and confidentiality controls and all legislative requirements met.

We know we are successful if our costings and analysis are reliable, timely, easily understood and ultimately trusted. These costings are underpinned by trusted models, the majority of which are able to produce robust results as inputs to costings and reports within one day of receiving the information we need.

Strategy

The PBO Data and Model Strategy will focus on 5 key areas each of which have a range of specific actions:



1. Governance

Clear strategic oversight, greater transparency and ownership of PBO data and model assets held by the PBO supports the effective management of risk. It also facilitates appropriate use of the information aligned with business objectives to realise benefits such as improved quality of costings and understanding the impact of economic and policy changes on the budget.

The strategy will be owned by an Assistant Parliamentary Budget Officer, with oversight from Executive Board and identified owners for each of the model and data assets.

All Tier 1 and Tier 2 model details will be maintained in the internal model hub and will feed into regular reporting and work prioritisation.

AIMS	ACTIONS	WHAT SUCCESS LOOKS LIKE
Clear responsibilities and accountabilities	1a) Establish Chief Data Officer -SES lead of data and model strategy1b) Ownership of models agreed and recorded in Model Hub	Staff have clear understanding of responsibilities Executive Board has clear visibility on the progress of the strategy
Improved budget transparency	1c) Publish key budget data in accessible ways such as Build Your Own Budget	Publication of updated information on budgets within two months that improves understanding on the impact of economic and policy changes
Up-to-date policies for data and models	1d) Ensure policies are up to date and understood	Continued public trust in the use of data by the PBO

2. Infrastructure

Modern common processes and tools support and facilitate the use of models and data.

PBO infrastructure will focus on developing and maintaining common technology, knowledge management and processes that enhances efficiency and supports the work undertaken across the PBO including costings, research and corporate.

AIMS	ACTIONS	WHAT SUCCESS LOOKS LIKE
Technology and systems support the use of data and models including collaboration, communication and publishing	2a) New website and parliamentarian request portal	PBO public analysis, data and models are readily accessible to parliamentarians and the public
Data and models readily discoverable	2b) Ensure visibility and understanding of departmental data assets	Improved discoverability of PBO models, information requests, other data and expertise to support costings and analysis
Use emerging forms of data-driven technology	2c) Explore automated public data collection, knowledge management and visualisation	Improved efficiencies through greater self-service products to address standard or low complexity enquiries

3. Culture and Capability

PBO supports a culture of sharing knowledge, collaboration with agencies and innovation to deliver high quality analysis and staff have access to training, communities of practice and fit for purpose tools. This includes the development of new fit for purpose solutions to ensure PBO analysis is timely and responsive.

AIMS	ACTIONS	WHAT SUCCESS LOOKS LIKE
Grow staff capability to use, interpret and analyse models	3a) Promote cross-skilling of staff	Increased number of staff can access relevant training and utilise PBO models
Access to up-to-date tools and infrastructure	3b) Increase modelling accessibility and capability	Enhanced capability and training to use cutting edge tools and technologies
Community of practice	3c) Workforce plan, recruitment and outreach strategies	Improved capability in use of specialist software
Attract and retain high performing staff to the PBO	3d) Workforce plan, recruitment and outreach strategies	Improved engaged staff census scores and increased number of high-quality applicants

4. Quality

The PBO has a clear focus on ensuring that key data and modelling assets are fit for purpose and can be leveraged to support consistent and reliable costings and analysis. In order to balance the need to withstand external scrutiny and to meet the pace of parliamentary debate, the majority of models should be able to produce robust results as inputs to costings and reports within one day of our receiving the relevant information.

AIMS	ACTIONS	WHAT SUCCESS LOOKS LIKE
Models can be readily understood	4a) Ensure data and model documentation is maintained4b) Create training resources for better practice models and documentation	Staff are able to understand and undertake/check analysis. New staff are trained by other analysts on best practice.
PBO maintains reliable and timely models	4c) Acquire, develop and maintain models to support timely costings and analyses	Increased number of models able to produce results within one day once updated information is received

5. Innovation

The PBO actively supports staff to test new approaches that increase our capability and efficiency, with an operational focus.

AIMS	ACTIONS	WHAT SUCCESS LOOKS LIKE
Improved efficiencies	5a) Automate and digitise tasks	Reduced direct staff time spent on repetitive tasks
Focus on innovation	5b) Build and promote communities of practice to focus on opportunities for innovation	Increased efficiency, capability and analysis
Operationalise innovation	5c) Ensure innovation learnings are shared and processes include consideration of innovation	Innovation is supported with ideas shared and able to be implemented
Future roadmap	5d) Engage with stakeholders and the PBO to develop future modelling roadmap	PBO data and modelling capabilities are future proofed and able to leverage off new opportunities

Strategic Oversight

Executive Board

Provides strategic oversight on data and model use and management within the PBO and ensures the PBO's work is supported by high quality evidence. Provide guidance on the future state for data and model management and require improved capability.

Chief Data Officer

Responsible for promoting, delivering and reporting on data and model management and architecture improvements across the organisation and will coordinate organisation-wide activities in support of the Data and Model Strategy.

Custodian

Maintains overall responsibility for the model and the associated data and documentation including the safe custody and storage within the PBO. Accountable for quality and ensuring models and data are managed consistent with PBO policies and agreements with external agencies.

Subject Matter Expert

Responsible for the day-to-day management of the model and data held by the PBO, manages data quality, privacy, safe access, sharing and usage arrangements, and proactively manages risks.

Manages model and data assets to ensure it is fit for purpose. Provides guidance as to how the model's data can be used.

Implementation Plan

A detailed internal Implementation Plan supports this Strategy which includes:

- clear descriptions and accountability of actions
- timing for each activity, taking into account the prioritisation and development time
- estimated resources required to ensure the activities are able to be prioritised.

Progress against key actions will be reported through the PBO's activity reports as well as Annual reports.